



Unit Shown: ESCR-50-24V-AV1



ESCR II Engine Starting Applications

The ESCR engine starting battery charger product line utilizes microprocessor controlled SCR Charging Technology. The PWM control provides the highest reliability that is required for maintaining and recharging engine start batteries for generator sets. This charger is suitable for various types of batteries such as flooded lead acid, VRLA and NiCad.

The 0.5% regulation, temperature compensation, battery check, equalize timer along with adjustable output voltage and current limiting assures longevity and performance for your batteries. This economical solution equipped with advanced features incorporates La Marche quality and reliability.

The front panel is equipped with LCD display, alarm status LED's and controls. The two-line LCD displays output voltage and current along with alarm status text description. Individual LED indicators provide local supervision.

Form "C" contacts are available for remote annunciation. Push button controls are used for Float/Equalize mode, Reset, Lamp Test and Configure. This all-in-one unit meets NFPA 110, C62.41A and UL safety requirements. The ESCR II units are certified for seismic applications in accordance with the International Building Code (IBC).

Standard Features

- Microprocessor Controlled SCR Technology
- Tap Select Input 120/208-240 VAC, 50/60Hz
- LCD Display
- Alarm LED's and Form "C" Contacts
- Adjustable Float and Equalize Voltages
- Automatic AC Input Voltage Compensation
- AC to DC Isolation
- Filtering Suitable for VRLA Batteries
- Battery Fault Detection
- Internal Temperature Compensation
- Multimode Equalize Timer
- AC & DC Breakers
- Soft Start
- Adjustable Current Limiting
- Meets NFPA 110 and C62.41A
- UL/CUL 1236 Listed
- CE Certified
- IBC Certified for seismic applications
- ABS Approved
- 3 Year Warranty

Optional Accessories

- 080** Drip Shield
- 09P** Conformal Coated Circuit Boards
- 101** 3 Battery Charge Divider - Negative Common
- 11W** External Temperature Compensation Probe
- 38H** ABS Certified Report
- 538** IBC Certification Label (consult factory for Anchor Kits)



Model Number	DC Output		AC Input		Overall Dimensions W x D x H	Case No.	Shipping Weight	
	Volts (Nominal)	Amps	Volts (Nominal)	Amps			lbs	kgs
ESCR-30-24V-AV1	24	30	120/208-240	18/9-8	16.8" x 10.6" x 19.7" 427.7 x 269.9 x 500.4mm	7-44	118	53.5
ESCR-40-24V-AV1	24	40	120/208-240	22/11-10	16.8" x 10.6" x 19.7" 427.7 x 269.9 x 500.4mm	7-44	125	56.7
ESCR-50-24V-AV1	24	50	120/208-240	26/14-13	16.8" x 10.6" x 19.7" 427.7 x 269.9 x 500.4mm	7-44	130	58.9

AC INPUT

- 120/208 - 240 VAC $\pm 10\%$, 50/60HZ, Single Phase

DC OUTPUT

- 30A @ 24V
- 40A @ 24V
- 50A @ 24V

REGULATION

- Line:** $< \pm 0.5\%$
- Load:** $< \pm 0.5\%$

OUTPUT FILTERING

(W/ Battery Connected)

- < 500 mV RMS**

PROTECTION

- Input**
Breaker with Surge Protection
- Output**
Breaker with Surge Protection

BATTERY CELL SELECTION

- 24 Volts**
12L
18NC
19NC
20NC

OUTPUT CURRENT LIMIT

- Factory set at 105%
Adjustable from 50 - 105%

METERING

- LCD DC Output Digital Voltmeter and Ammeter (1%)

ADJUSTABLE VOLTAGE RANGE

- Float Voltage**
2.12 - 2.3 volts/cell (Lead)
1.39 - 1.45 volts/cell (NiCad)
- Equalize Voltage**
2.25 - 2.40 volts/cell (Lead)
1.45 - 1.6 volts/cell (NiCad)

CONTROLS

- Float and Equalize Button**
Switch from Float to Equalize
- Configure Button**
Output Settings
Voltage and Cells
Adjust Voltage for Float & Equalize
Adjust Alarm Settings and Delay
Enable/Disable Temperature Compensation
Equalize Timer
~ Multi-Mode Equalize Timer and Light;
adjustable from 1 - 144 hrs
~ Five selectable modes: Manual, 7-day, 14-day,
30-day and Equalize after Low DC Voltage
and/or AC Failure (Default Factory Setting)
- Reset Button**
Restarts the Unit
- Lamp Test Button**
Tests LCD Display & LED's

ALARM CONTACTS

- AC Failure
 - Low DC Voltage
 - High DC Voltage
 - Charger Failure
- Form "C" contact rated 2A @ 30VDC/0.5A @ 125VAC

MONITORING

- LCD Display**
Volts
Amps
Status
- LED Indications**
Float (Green)
Equalize (Yellow)
AC ON (Green)
Charger Failure (Red)
Battery Fault (Red)
Current Limit (Red)
High DC Voltage (Red)
Low DC Voltage (Red)

ENVIRONMENTAL

- Operating**
-20° to 50° C
- Storage**
-40° to 85° C
- Relative Humidity**
5% to 95% non-condensing

ENCLOSURE

- Structural Design**
Wall/Floor Mount NEMA 1
powder coated
- Cable Entry**
Both sides

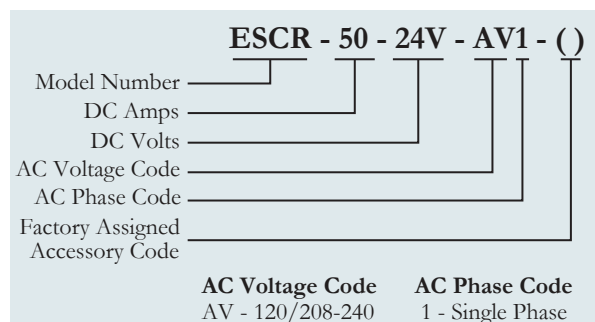
STANDARDS

- UL 1236
- CUL
- NFPA 110
- C62.41A
- CE
- IBC*
- ABS**

* Refer to the manual for mounting information

** May require Drip Shield based on site requirements

Model Number Nomenclature



Front Panel Display

